

# EUROPEAN PATENT OFFICE

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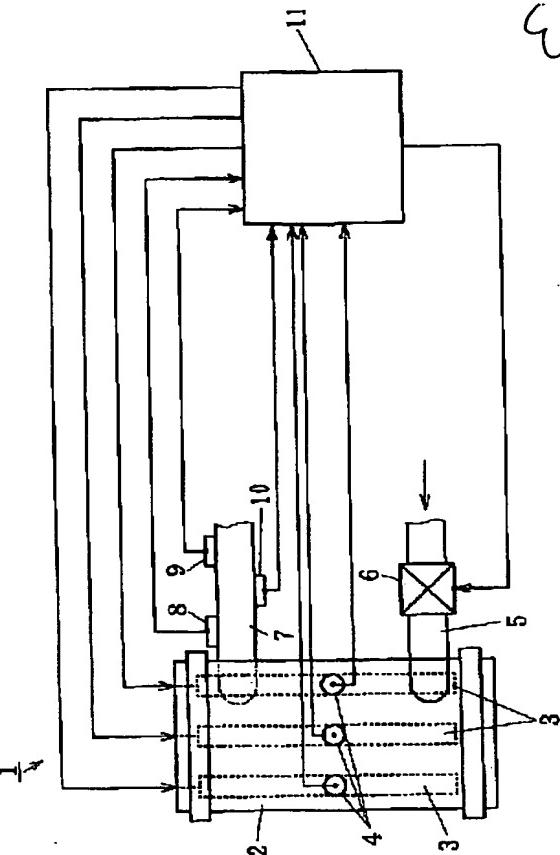
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TITLE : WATER PURIFIER AND HOT WATER  
POOL WATER PURIFYING SYSTEM  
USING THE PURIFIER



ABSTRACT : PROBLEM TO BE SOLVED: To obtain a water purifier, etc., capable of optimum UV irradiation, excellent in sterilization, coping with large-capacity water treatment and also excellent in maintainability by arranging a raw water feed part and a purified water discharge part tangentially to the lower part (upstream side) and upper part (downstream side) of a UV irradiation tank.

SOLUTION: Raw water is passed through a flow control valve 6 from a raw water feed part 5 and supplied to a UV irradiation tank 2 provided with six UV irradiation lamps 3 inside. Since the raw water feed part 5 is formed tangentially to the tank 2 on the upstream side, the raw water is introduced and revolved. Besides, since the lamps 3 are positioned on the inner wall side and a UV sensor 4 is projected from the inner wall, the raw water is collided with them to form a turbulent flow. Accordingly, the raw water is exposed to the UV at all times. Further, as the raw water discharge part 7 is tangentially formed on the downstream side of the tank 2, the raw water is made turbulent, revolved and sent upward. Accordingly, the shortcircuiting of the raw water is prevented, and the raw water is completely sterilized.

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